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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,868	09/04/2001	Paul Morgavi	032326-163	4219
21839	7590	09/30/2005	EXAMINER	
BUCHANAN INGERSOLL PC (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			RAHIMI, IRAJ A	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/914,868

Applicant(s)

MORGAVI, PAUL

Examiner

(Iraj) Alan Rahimi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) 12, 13, 15, 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

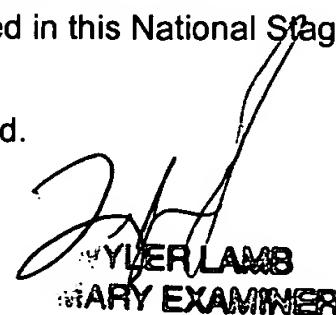
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


TYLER LAMB
PRIMARY EXAMINER

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In papers filed on July 15, 2005 applicant amended claims 1 and 4. The preliminary amendment filed on September 4, 2001 was received and entered. Objection to specification is removed since the preliminary amendment corrected the specification format. Changes to claim 4 were considered acceptable in removing the 112 rejection.

Response to Arguments

2. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 6, 7, 9, 14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cummins (US patent 5,980,011) in view of McCannel (US patent 6,173,901).

Regarding claim 1, Cummins discloses a machine for graphic printing on at least one card medium, comprising:

at least one ink-jet head 16;

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means for controlling the head in order to implement ink-jet printing on the card (controller 14);

However Cummins does not disclose a computer-aided vision device having at least one video camera for dynamic measurement of geometric and/or positioning parameters of the card for communication to the control means; and

means for checking the quality of the printing and modifying ink-jet printing parameters.

McCannel discloses in column 3, lines 67 and column 4, lines 1-5 a comparator 20 for comparing printed indicia on the card and any discrepancy is relayed back to the controller 14 which adjust data feed to the ink-jet printer. It is well that optical vision systems are widely used in the manufacturing environment to inspect parts. These systems rely on optical measurement of the part using CCD cameras and comparing the image with set of standards or measurement values. The feedback loops provide the data back to the machine for on-line adjustment to product attributes. The comparator of McCannel is considered to be similar with the video camera of instant application since the comparator is used to provide feed back to the inkjet printer to correct discrepancies.

Cummins and Mc Cannel are combinable because they are from the same field of endeavor that is printing images on a substrate like a card.

At the time of invention it would have been obvious to a person ordinary skill in the art to use Mc Cannel for providing feedback to the printer.

The motivation to do so would have been to improve print the data more rapidly and more accurately. (column 4, lines 6-22).

Therefore it would have been obvious to combine Cummins and McCannel to obtain the invention as specified in claim 1.

Regarding claim 3, Cummins discloses a machine according to Claim 1, wherein the card medium is made of cardboard or paper (identification cards are typically printed on paper), and the inks used are aqueous, phase-change or solvent-based (column 1, lines 25-34).

Regarding claim 6, McCannel discloses a machine according to claim 1, further including a support element for receiving a plurality of cards to be printed and transporting said cards past the head of the machine for continuous printing.

McCannel discloses this limitation in Fig. 1.

Regarding claim 7, McCannel discloses a machine according to Claim 6, wherein the support element comprises a flat conveyor (Fig. 1).

Regarding claim 9, McCannel discloses a machine according to claim 6, wherein the support element is perforated, and includes a suction device to hold the cards while it is moving (Fig. 1; column 3, lines 41-46).

Regarding claim 14, Cummins discloses a machine according to claim 1, further including means for cross-linking the ink at the end of printing (column 6, lines 66-67).

Regarding claim 17, Cummins discloses a machine according to claim 11, wherein another one of said print heads is a monochrome head (inkjet 16) for marking the card medium.

Regarding claim 18, Cummins discloses a machine according to claim 14, wherein said cross-linking is performed by means of an ultraviolet lamp (column 6, lines 66-67).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cummins (US patent 5,980,011) in view of McCannel (US patent 6,173,901) and further in view of Amon (US patent 6,306,929).

Regarding claim 2, Cummins in view of McCannel do not disclose a machine according to claim 1, wherein the medium card is made of plastic, and the inks used are capable of being cross-linked by radiation. Amon discloses in column 4, lines 47-65 and column 5, lines 1-10 curing the ink on plastic using UV radiation.

Cummins, McCannel and Amon are combinable because they are from the same field of endeavor that is printing images on a substrate.

At the time of invention it would have been obvious to a person ordinary skill in the art to use UV radiation to cure ink on plastic.

The motivation to do so would have been to make the ink cure faster than air-drying.

Therefore it would have been obvious to combine Cummins, McCannel and Amon to obtain the invention as specified in claim 2.

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6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cummins (US patent 5,980,011) in view of McCannel (US patent 6,173,901) and further in view of Klinefelter (US patent 6694,884).

Regarding claim 8, Cummins in view of McCannel do not disclose a machine according to Claim 6 wherein the support element comprises a drum. Klinefelter discloses rollers 34 in Fig. 1 to meet this limitation.

Cummins, McCannel and Klinefelter are combinable because they are from the same field of endeavor that is printing images on a substrate.

At the time of invention it would have been obvious to a person ordinary skill in the art to use a drum as the support element.

The motivation to do so would have been to reduce the length of the machine by eliminating a long conveyor belt.

Therefore it would have been obvious to combine Cummins, McCannel and Klinefelter to obtain the invention as specified in claim 8.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cummins (US patent 5,980,011) in view of McCannel (US patent 6,173,901) and further in view of Kobayashi (US patent 5,771,058).

Regarding claim 10, Cummins in view of McCannel do not disclose a machine according to Claim 6 wherein the support element comprises a drum. Kobayashi discloses rollers 34 in Fig. 1 to meet this limitation.

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Cummins, McCannel and Kobayashi are combinable because they are from the same field of endeavor that is printing images on a substrate.

At the time of invention it would have been obvious to a person ordinary skill in the art to use a drum as the support element.

The motivation to do so would have been to use the same printing machine to print on the back of the card.

Therefore it would have been obvious to combine Cummins, McCannel and Kobayashi to obtain the invention as specified in claim 10.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cummins (US patent 5,980,011) in view of McCannel (US patent 6,173,901) and further in view of Greive (US patent 6,189,684).

Regarding claim 11, Cummins in view of McCannel do not disclose a machine according to Claim 6, comprising a number of print heads aligned along the direction of movement of the support element and facing said support element, at least one of which is a colour print head for printing images of the photographic or coloured type. Greive discloses in column 1, lines 22-31 print heads for color printing.

Cummins, McCannel and Greive are combinable because they are from the same field of endeavor that is printing images on a substrate.

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At the time of invention it would have been obvious to a person ordinary skill in the art to use number of print heads for color printing.

The motivation to do so would have been to use a separate head for each primary color.

Therefore it would have been obvious to combine Cummins, McCannel and Greive to obtain the invention as specified in claim 11.

Allowable Subject Matter

9. Claims 12, 13, 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other Prior Art Cited

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mishima et al. (US patent 6,579,139) discloses a forming a film on a substrate and employing the calculated positional information.

Weber et al. (US patent 6,286,517) discloses fingernail and toenail decoration using ink jet.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Iraj) Alan Rahimi whose telephone number is 571-272-7411. The examiner can normally be reached on Mon.-Fri. 8:00 - 4:30.

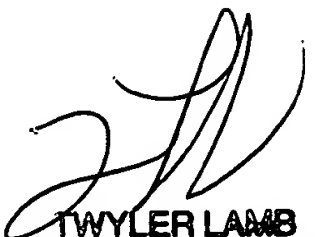
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.



Alan Rahimi
September 26, 2005



TWYLER LAMB
PRIMARY EXAMINER